

10/045,499

IN THE SPECIFICATION:

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Page 9, lines 1-16, amend both paragraphs as follows:

B<sup>1</sup>

It is to be noted that the structure in Figure 7 may be achieved using several methods. For example, after the top of the trench is filled with TTO, the shallow trench isolation (STI) and fill processes are performed. The top of the trench may be filled concurrently as the STI. The pad nitride is then [shipped] stripped, spacers 79 are formed, the gate sacrificial oxide is grown, implants performed, the sacrificial oxide is [stripped] stripped, the gate oxide is grown, and the gate polysilicon is deposited and polished to the TTO (32). The rest of the gate stack is deposited and the rest of the processing is conventional.

In another example, the structure in Figure 7 can be formed using the following process. After the top of the trench is filled with TTO as in Figure 6, the pad nitride is [shipped] stripped, spacers 79 are formed, the sacrificial oxide gate is grown, implants performed, the sacrificial oxide is stripped, the gate oxide is grown, and the gate polysilicon is deposited and polished to the TTO (32). A fresh pad nitride is then deposited and STI is formed and filled. The pad nitride is stripped, the rest of the gate stack is deposited and the conventional processing is then performed to complete the structure.

Page 10, beginning on line 12, replace the paragraph as follows:

B<sup>2</sup>

Thus, as most clearly shown in Figure 7, the invention is a dynamic random access memory device that includes a storage trench, a storage conductor 20 within the storage trench, a lip strap 26 connected to the storage conductor 20, and a control device

B<sup>2</sup>  
Cont'd

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77 (e.g., transistor) electrically connected to the storage conductor 20 through the lip strap 26. The lip strap 26 is a conductor that extends along a side of the trench and along a portion of the transistor [77] conductive region (e.g., source/drain) and, therefore, surrounds a top corner of the trench. The lip strap 26 extends from a top of the collar 12 to a top of the trench and along a surface of the device adjacent the trench and perpendicular to the trench. In other words, the lip strap 26 extends along two perpendicular portions of the top corner of the trench.

Page 11, line 5, replace the paragraph as follows:

B<sup>3</sup>

A major advantage of the last embodiment is that the buried strap 26 is formed after the AA oxidation and thus the invention has a reduced strap out diffusion. All of the embodiments of this invention protect the active silicon in the trench top region from the HDP oxide STI fill. Also, there is no risk of autodoping from the 'lip' to the neighboring active area with the invention. Further, with the invention, the lip strap 26 connection allows better control of leakage current and, as a result, is much more scalable. Further, the processing discussed above [the] allows the lip strap 26 to be self-aligned, thereby avoiding [the] inaccuracies and problems associated with lithographic techniques.